

# Procedure to Upgrade the Firmware on the BASRT-B

## Equipment provided by the user:

- A computer (PC) with a USB port.
- Windows® XP, Vista or 7
- A USB cable (Type A to 5-pin mini B).

**NOTE:** Your configuration settings **will be lost**, so **record them for possible later reentry**.

1. Copy the ATMEL **SAM-BA** in-system programming tool (**sam-ba\_2.11.exe**) to any location on your hard drive. Open it and follow the Install wizard. If an existing SAM-BA tool is on your PC, an Uninstall wizard will open. **Uninstall the old tool** before proceeding. When completing the Install wizard, allow it to create a Desktop Shortcut for later use.
2. Remove power from the BASRT-B for one minute.
3. Open the unit's case and then apply power. Wait 10 seconds and then proceed to the next step.  
(Steps 4–6 are used to erase the flash memory.)
4. Locate **JP1** and its jumper which is in default (open) condition.
5. Move the jumper to the closed condition (both **JP1** posts shorted together) then wait one minute and connect the unit to your PC with a USB cable.
6. Remove the unit's power and restore the **JP1** jumper to its original (open) condition.
7. Repower the unit.
8. If your PC does not recognize the device, try another USB port.
9. If Windows asks to install a driver, point it to where you installed the SAM-BA driver subfolder, which by default will be one of the following locations:

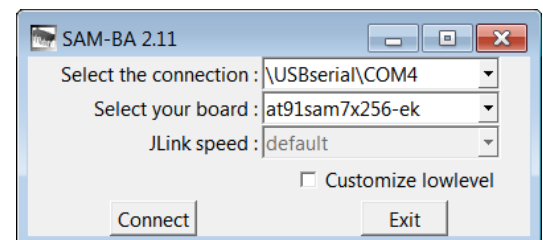
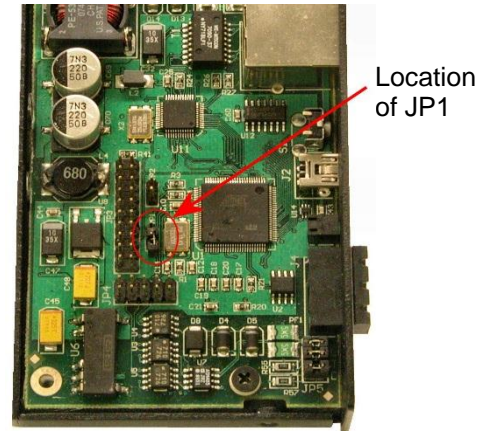
**In Windows XP:**     Program Files\ATMEL Corporation\sam-ba\_2.11\drv  
**In Windows 7:**     Program Files (x86)\ATMEL Corporation\sam-ba\_2.11\drv

The default Windows 7 location for more SAM-BA driver information is:

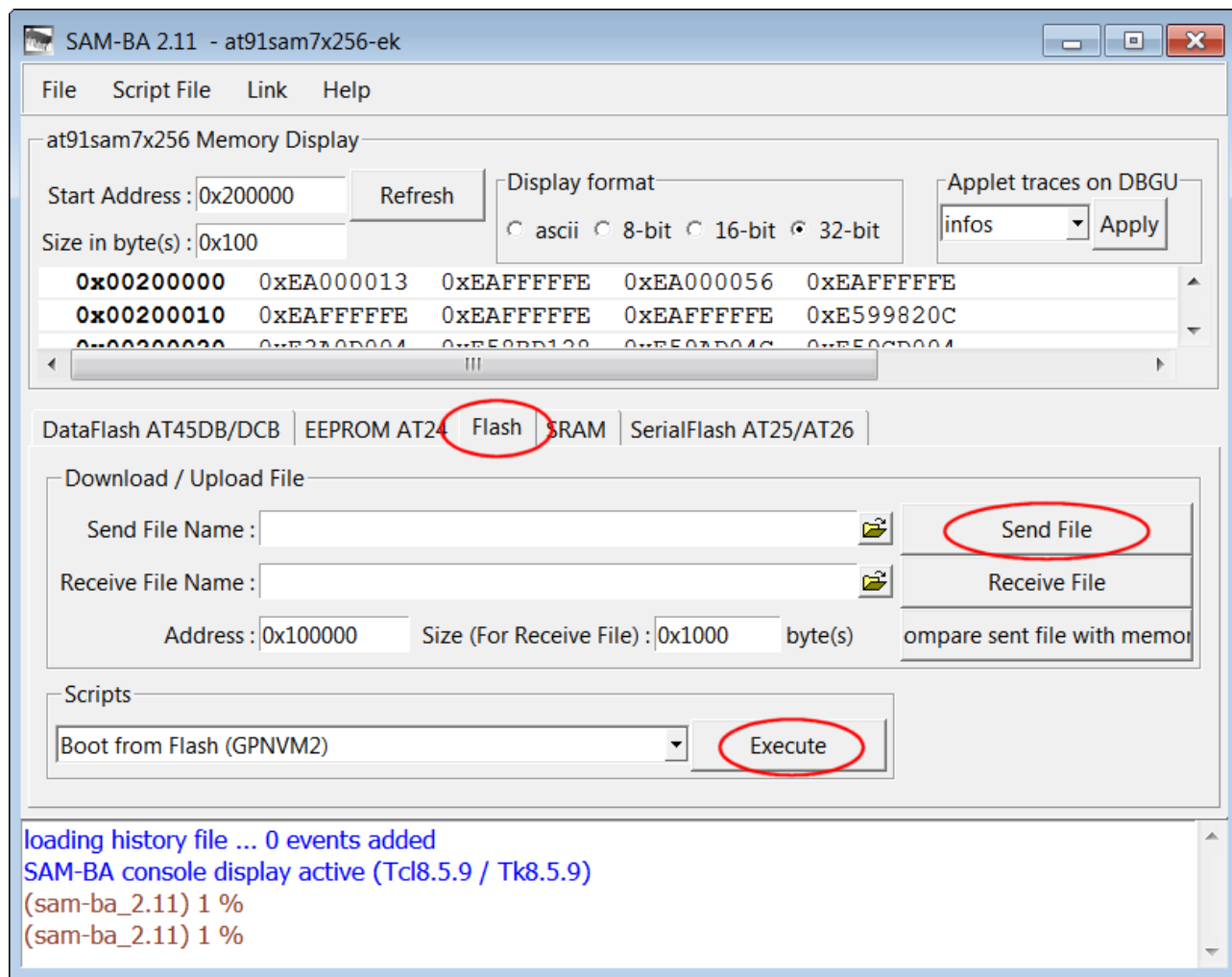
**Program Files (x86)\ATMEL Corporation\sam-ba\_2.11\drv11\doc\usb\_notice.html**

When installing the device, it might generate an error message, stipulating that the device installation failed — and with no prompt to install the driver. In this case, go to Device Manager, examine the list of devices and find the unrecognized device. Then right-click on it to select the *Update Driver* option and point the wizard to the SAM-BA driver subfolder.

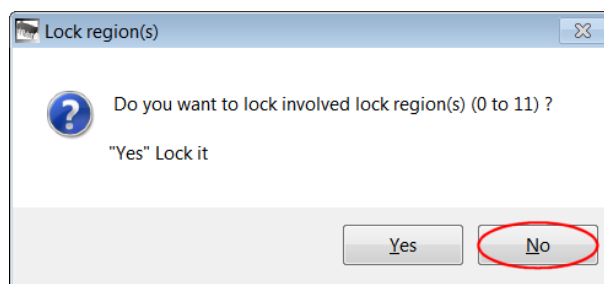
10. Run the Desktop Shortcut to launch **sam-ba.exe**. (If you are using Windows 7 or 8, be sure to **Run as administrator**.) A window will appear similar to this one. →
11. The "Select the connection" box will display the connection that was chosen by Windows.
12. The "Select your board" box should display **at91sam7x256-ek** by default. If not, choose it.
13. Click the "Connect" button. If the screen on the next page fails to appear, you cannot connect to the device and you must repeat the preceding steps.



14. In the middle of the screen below, choose the "Flash" tab (circled in red). In the "Send File Name" box, browse to your new binary file which has the form: *basrt\_firmware\_vers\_x x xx.bin* — but your specific file name will reflect the *actual* version number in place of the red "x" symbols in the generic file name. On the right side of the screen below, click "Send File" (circled in red).



15. After the download is finished, the following dialog appears. Select "No" (circled in red below).



16. In the "Scripts" box in the lower-left part of the screen in step 14, "Boot from Flash" should appear in the drop-down list. If not, choose it. To the right of the list, click "Execute" (circled in red).
17. Power down the device — close and secure the case. The firmware update is now complete.
18. If needed, download a copy the installation guide from [www.ccontrols.com](http://www.ccontrols.com). In the installation guide, follow **IP Address Reset Switch** instructions and **Webpage Configuration** instructions to restore default values and reassign IP values. The router webpage should show the new version number.